

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

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AGERE SYSTEMS, INC., CYTEC INDUSTRIES  
INC., FORD MOTOR COMPANY, SPS  
TECHNOLOGIES, LLC and TI AUTOMOTIVE  
SYSTEMS LLC,

Plaintiffs,

v.

ADVANCED ENVIRONMENTAL TECHNOLOGY  
CORPORATION, AHS LAND, INC., CARPENTER  
TECHNOLOGY CORPORATION, DIAZ  
CHEMICAL CORPORATION, fcg, INC., HANDY &  
HARMAN TUBE COMPANY, NRM INVESTMENT  
COMPANY,

Defendants.

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CIVIL ACTION NO.  
02-cv-3830 (LDD)

**DEFENDANT, HANDY & HARMAN TUBE COMPANY, INC.'S  
PRETRIAL MEMORANDUM**

In accordance with the Court's May 13, 2008 Order, defendant, Handy & Harman Tube Company, Inc. ("H&H Tube"), hereby submits this Pretrial Memorandum.

**I. A Brief Statement of the Nature of the Case to be Presented and the Issues to be Addressed**

On or about June 18, 2002, BFAG filed the within action seeking contribution based upon an equitable allocation under the Comprehensive Environmental Response, Compensation and Liability Act, as amended ("CERCLA") §§ 113(f) and (g) and the Pennsylvania Hazardous Sites Cleanup Act ("HSCA").

In 1989, several years prior to the filing of this action, the Environmental Protection Agency (“EPA”) designated Boarhead Farm as a Superfund site (the “Site”). As a result of this designation, EPA conducted a Remedial Investigation and Feasibility Study (“RI/FS”) to investigate the nature and extent of the contamination at the Site. In 1998, following the conclusion of the RI/FS, EPA issued its Record of Decision (“ROD”) indicating the remediation technologies to be implemented at the Site. EPA then issued both General Notice letters and Special Notice letters to a number of potentially responsible parties.

In 1992 and 1993, EPA removed over 2,500 buried drums and numerous leaking tank trucks from the Site. During 1997, EPA constructed an interception trench and an on-site groundwater treatment facility to treat volatile organic chemical contamination.

On September 28, 2000, the EPA filed a Consent Decree with this Court pertaining to Operable Unit 1 (“OU-1”). OU-1 addresses the groundwater recovery and treatment system and requires ongoing recovery and treatment until the standards set forth in the ROD are accomplished. SPS Technologies, Inc. (“SPS”), Ford Motor Company (“Ford”), and Cytec Industries (“Cytec”) are signatories to the OU-1 Consent Decree. Agere and TI are not signatories to the OU-1 Consent Decree.

The EPA reached a second settlement with four of the five Plaintiffs (SPS, Ford, Cytec and TI) with respect to Operable Unit 2 (“OU-2”). OU-2 relates to remedial actions, other than groundwater, as well as reimbursement to the EPA for response costs. The OU-2 Consent Decree was filed with this Court on or about March 14, 2002. Agere was not a signatory to the OU-2 Consent Decree.

Plaintiffs originally named as defendants 26 entities from whom plaintiffs sought contribution. Plaintiffs settled with a number of defendants resulting in orders of dismissal<sup>1</sup> for each of the settled defendant.

In January 2008, the Court permitted plaintiffs to amend their Fourth Amended Complaint and assert CERCLA §107 claims against the remaining defendants. As a result, at trial, plaintiffs will be asserting, to the extent permitted by law, CERCLA §§107 and 113 claims against the defendants. Defendants have counterclaimed against plaintiffs and have cross claims against each other.

The issues to be addressed include, but are not limited to the following:

- Whether Plaintiffs are entitled to contribution under CERCLA §113 and/or cost recovery under CERCLA §107.
- Whether Plaintiffs are entitled to recover any monies paid by Agere under CERCLA §113 for costs relating to OU-1 and OU-2.
- Whether Plaintiffs are entitled to recover any monies paid by TI under CERCLA §113 for costs relating to OU-1.
- Whether Plaintiffs are entitled to recover any monies paid by Smiths' entities on behalf of TI.
- Whether Plaintiffs are entitled to recover any monies paid by them to the EPA with respect to the 1992 and 1993 removal actions.
- Whether Plaintiffs have paid more than their fair share.
- Whether the contamination at the Site is indivisible.

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<sup>1</sup> This Court previously ruled that as a result of the settlements, the Uniform Comparative Fault Act ("UCFA") applies, meaning that plaintiffs are responsible for the equitable allocation of the settling defendants as well as their own allocation.

**II. A List of All Witnesses to Appear at Trial with a Brief Statement of the Nature of Each Witness' Anticipated Testimony**

Mary Kollmar – Ms. Kollmar will testify on the following issues for relevant time periods:

- H&H Tube's operations at its Norristown facility
- The manner in which H&H Tube disposed of the facility's spent acid
- The disposal of degreaser still bottoms
- Waste streams generated at the facility
- TCE purchased by H&H Tube for use at the Norristown facility

Thomas Curran – Mr. Curran will testify on the following issues for relevant time periods:

- H&H Tube's operations at its Norristown facility
- The manner in which H&H Tube disposed of the facility's spent acid
- The disposal of degreaser still bottoms
- Waste streams generated at the facility

Thomas Bell – Mr. Bell will testify on the following issues for relevant time periods:

- H&H Tube's operations at its Norristown facility

Frederick Chesky - Mr. Chesky will testify on the following issues for relevant time periods:

- National Rolling Mills' operations at its Malvern facility
- The manner in which National Rolling Mills disposed of the facility's waste
- Waste streams generated at the facility

Michael Civitello - Mr. Civitello will testify on the following issues for relevant time periods:

- National Rolling Mills' operations at its Malvern facility
- Waste streams generated at the facility

Peter Freda - Mr. Freda will testify on the following issues for relevant time periods:

- National Rolling Mills' operations at its Malvern facility
- The manner in which National Rolling Mills disposed of the facility's waste

- Waste streams generated at the facility

Fred Piotti, Sr. - Mr. Piotti will testify on the following issues for relevant time periods:

- National Rolling Mills' operations at its Malvern facility
- The manner in which National Rolling Mills disposed of the facility's waste
- Waste streams generated at the facility

Santo Quici - Mr. Quici will testify on the following issues for relevant time periods:

- National Rolling Mills' operations at its Malvern facility
- The manner in which National Rolling Mills disposed of the facility's waste
- Waste streams generated at the facility
- Waste haulers

Merle Winters - Mr. Winters will testify on the following issues for relevant time periods:

- National Rolling Mills' operations at its Malvern facility
- The manner in which National Rolling Mills disposed of the facility's waste
- Waste streams generated at the facility

Dr. Kirk W. Brown, Ph.D. – Dr. Brown will testify with respect to the following:

- The chemical fingerprint of the wastes contained in the drums that were removed from the Site including chemical compounds and metals that were not used at H&H Tube's facility and therefore the drummed wastes buried at the Site could not be attributed to H&H Tube
- The contaminated soils and groundwater associated with the "hot spots" at the Site containing benzene and PCE with a mixture of other chlorinated volatile organic compounds were not caused by waste generated by H&H Tube
- If H&H Tube's waste had been disposed of at the Site, such as metals, spent solvents and spent acids, these wastes would be indistinguishable from the waste contributed by other parties.
- If H&H Tube's waste had been disposed of at the Site, waste attributable solely to H&H Tube would not be distinguishable from the wastes identified in the soils and shallow groundwater at the Site.
- The contribution from H&H Tube, if any, to the contamination due to bulk waste disposal at the Site would be at most, *de minimus*.

- The contribution from H&H Tube, if any, to the contamination due to the drummed waste disposal at the Site would be at most *de minimus*.
- The contribution from H&H Tube, if any, to the contamination due to the total volume of waste disposed of at the Site would be at most *de minimus*.
- The acid waste facilitated the movement of metals to the groundwater and triggered the need for remediation of the groundwater for metals.

Joseph J. Hochreiter, Jr. – Mr. Hochreiter will testify with respect to the nature and extent of wastes that were generated for plaintiffs and settled defendants during relevant time periods including the following:

- American Cyanamid's wastes generated totaled 10,546,745 gallons; extrapolated quantities of wastes generated totaled 14,921,473
- National Rolling Mills' wastes generated totaled 661,100 gallons; extrapolated quantities of wastes generated totaled 1,959,533
- Philco Ford's wastes generated totaled 708 55-gallon drums of waste
- Standard Press Steel's wastes generated totaled 134,080 gallons; extrapolated quantities of wastes generated totaled 1,236,088
- Western Electric's wastes generated from the Reading facility totaled 313,836 gallons and 1,828,197 pounds; extrapolated quantities of wastes generated totaled 2,510,688 gallons and 14,625,576 pounds
- Western Electric's wastes generated from the North Carolina facility totaled 101,235 pounds; extrapolated quantities totaled 4,859,280 pounds
- Western Electric's wastes generated from the Allentown facility totaled 111,800 gallons; extrapolated quantities totaled 807,200 to 928,000 gallons
- Bostik South's wastes generated totaled 37,665 gallons
- Ciba-Geigy's wastes generated totaled 69,367 gallons; extrapolated quantities totaled 728,239
- Knoll International Inc.'s wastes generated totaled 39,500 to 45,000 gallons
- Plymouth Tube Company's wastes totaled 28,000 gallons; extrapolated quantities totaled 299,000
- Quikline Design and Manufacturing Company's wastes generated totaled 1,925 gallons
- Simon Wrecking's wastes generated totaled 178,000 gallons
- Sperry/Burroughs' wastes generated totaled 3,615 gallons

Rule 30(b)(6) Witnesses

Brian J. Busa (Ford)

Dennis Shea (SPS)

Marianne Santarelli (Agere)

Joel Jerome (Cytec)

The foregoing witnesses will testify on the following issues:

- Waste streams generated at their respective facilities during relevant time periods
- Drummed waste
- Use of TCE
- Disposal of wastes from their respective facilities

In-House Counsel

Jocelyn T. de Grandpre (Agere)

Thomas Mesevage (Cytec)

Dennis Shea (SPS)

Kathy Hofel (Ford)

Ralph Kessler (TI – Outside counsel)

The foregoing witnesses will testify on the following issues:

- The contents and basis for the allegations in the complaint and amended complaints

Individuals Verifying Plaintiffs' Responses to Defendants' Joint Contention Interrogatories

Louis J. Ghilardi (Ford)

Kathryn Lamping (Ford)

Timothy M. Guerriero (TI)

Thomas E. Mesevage (Cytec)

Jocelyn T. de Grandpre (Agere)

Thomas S. Cross (SPS)

The foregoing witnesses will testify with respect to plaintiffs' responses, and any supplements, to the Joint Contention Interrogatories of Advanced Environmental Technology Corporation, Ashland, Inc., Carpenter Technology Corporation, fcg, inc., Handy & Harman Tube Company, Inc. and NRM Investment Company, dated April 17, 2007, November 21, 2007 and/or February 8, 2008.

Jay Vandeven – Mr. Vandeven will testify regarding to all issues supporting his opinion that all of the wastes disposed of at the Site contributed in some manner to the environmental conditions that led to the response activities at the Site.

Should one or more of these individuals be unavailable to testify at trial, H&H Tube intends to offer into evidence portions of the transcripts of the depositions taken in this action of those individuals. Transcripts of the depositions taken in this action have not been listed as exhibits, but may be used at trial as permitted.

**III. A List of All Exhibits to be Offered at Trial (pre-numbered and pre-exchanged among all counsel)**

*See* H&H Tube's Schedule of Trial Exhibits attached hereto as Exhibit A. In addition to the exhibits set forth on Exhibit A, H&H Tube reserves the right to introduce into evidence any exhibit contained on plaintiffs' exhibit list and/or on any of the co-defendants' exhibit lists.

**IV. An Itemized Statement of Damages and/or Other Tangible Relief Sought by any Party Seeking Damages and/or Other Tangible Relief**

*See* Section V.F. – Equitable Allocation and Section V.G. – Damages, below.

**V. A List of Stipulations Between the Parties and A List of Disputed and Undisputed Facts**

H&H Tube has communicated with Plaintiffs' counsel, advising which of their facts H&H Tube would stipulate to. It is anticipated that the parties will meet and confer prior to trial and reach a consensus as to stipulated facts.

**A. The Parties**

**(1) Plaintiffs**

1. Plaintiff, Cytec Industries, Inc. ("Cytec"), is a Delaware Corporation, having its principal place of business in West Paterson, New Jersey. Cytec is the corporate successor to American Cyanamid Company.

2. Plaintiff, TI Group Automotive Systems, LLC ("TI"), is a Delaware limited liability corporation, having its principal place of business in Warren, Michigan. TI is the corporate successor to TI Automotive Systems, who was the successor to the NRM division of Bundy Corporation.

3. Plaintiff, Ford Motor Company ("Ford"), is a Delaware corporation, having its principal place of business in Dearborn, Michigan. Ford is the corporate successor to Philco Ford.



4. Plaintiff, SPS Technologies, LLC (“SPS”), is a Pennsylvania limited liability company, having its principal place of business in Jenkintown, Pennsylvania. SPS is the corporate successor to Standard Press Steel.

5. Plaintiff, Agere Systems, Inc. (“Agere”), is a Delaware corporation, having its principal place of business in Allentown, Pennsylvania. Agere is the corporate successor to Lucent Technologies who was the corporate successor to Western Electric.

**(2) Defendants**

6. Defendant, Advanced Environmental Technology Corp. (“AETC”), is a New Jersey corporation, having its principal place of business in Flanders, New Jersey.

7. Defendant, Ashland Inc. (“Ashland”), is a Kentucky corporation, having its principal place of business in Russell, Kentucky.

8. Defendant, Carpenter Technology Corporation (“Carpenter”), is a Delaware corporation, having its principal place of business in Reading, Pennsylvania.

9. Defendant, Diaz Chemical Corporation (“Diaz”), is a New York corporation, having its principal place of business in Holley, New York.

10. Defendant, Handy & Harman Tube Company (“H&H Tube”), is a Delaware corporation, having its principal place of business in Norristown, Pennsylvania.

11. Defendant, NRM Investment Company (“NRM”), is a Pennsylvania corporation, having its principal place of business in Rosemont, Pennsylvania.

**(3) Settled Defendants**

12. Settled Defendants, Crown Metro, Inc. and Emhart Corporation, are corporate successors to Bostik South, Inc.

13. Settled Defendants, Knoll International, Inc. and Knoll Inc., are the corporate successors to Art-Metal Knoll Corporation.

14. Settled Defendant, Plymouth Tube Company (“Plymouth”), is a Michigan corporation, having its principal place of business in Warrenville, Illinois.

15. Settled Defendant, Quickline Design and Manufacturing, Inc. (“Quickline”), is a New Jersey corporation, having its principal place of business in Gloucester City, New Jersey.

16. Settled Defendant, Novartis Corporation, is a New York corporation, having its principal place of business in Tarrytown, New York. Novartis Corporation is the corporate successor to Ciba-Geigy Corporation (“Ciba”).

17. Settled Defendant Rohm & Haas Company is a Pennsylvania corporation, having its principal place of business in Philadelphia, Pennsylvania.

18. Settled Defendant Rahns Specialty Metals, Inc. (“Rahns”), is a Pennsylvania corporation, having its principal place of business in Collegeville, Pennsylvania. Rahns is the corporate successor to Techalloy Co., Inc. (“Techalloy”).

19. Settled Defendant Techalloy is a Pennsylvania corporation, having its principal place of business in Mahwah, New Jersey.

20. Settled Defendant Thomas & Betts Corporation (“T&B”) is a Tennessee corporation, having its principal place of business in Memphis, Tennessee. T&B is the corporate successor to Ansley Electronics Corporation.

21. Settled Defendant Unisys Corporation (“Unisys”) is a Delaware corporation, having its principal place of business in Blue Bell, Pennsylvania. Unisys is the corporate successor to Sperry Corporation.

22. Settled Defendant United States Department of Navy had a 734 acre facility in Warminster, Pennsylvania.

23. Settled Defendant, fcg, Inc. (a/k/a Flexible Circuits, Inc.) ("Flexible"), is a Pennsylvania corporation, having its principal place of business in Warrington, Pennsylvania.

**B. The Site**

24. Manfred DeRewal, Sr. ("DeRewal") caused Boarhead Corporation to be incorporated on September 2, 1969. On October 16, 1969, Boarhead Corporation purchased the Boarhead Farm (the "Site"), located on Lonely Cottage Road, Upper Black Eddy, Bucks County, Pennsylvania.

25. Prior to DeRewal's purchase of the Site, it was a horse farm. There was a chicken coop that was turned into an office where all of DeRewal's business files were located. The Site served as the center for the operations of all of DeRewal's companies.

26. DeRewal caused DeRewal Chemical Co., Inc. ("DCC") to be formed on December 29, 1969. DCC began disposal activities at the Site in 1970 or 1971.

**C. Remediation Activities at the Site**

27. The EPA was alerted to the Site when it commenced a "site investigation" ("SI") of the Site.

28. EPA issued a final SI report in 1986.

29. In 1989, the EPA designated the Site as a Superfund site. As a result of this designation, EPA conducted a RI/FS to investigate the nature and extent of the contamination at the Site. In 1998, following the conclusion of the RI/FS, EPA issued its ROD indicating the remediation technologies to be implemented at the Site. EPA then issued both General Notice letters and Special Notice letters to a number of potentially responsible parties.

30. EPA conducted what EPA has described as its first removal action at the Site (the “First Removal Action”) in 1992.

31. The First Removal Action began on July 29, 1992. On September 4, 1992, EPA made a determination to grant a waiver under § 9604(c)(1)(C) of CERCLA for continued removal actions at the Site, thereby establishing an exemption from the otherwise applicable \$2 million statutory limit on removal action expenditures.

32. EPA conducted what EPA has described as its second removal action at the Site (the “Second Removal Action”) in 1993.

33. In its November 18, 1998 ROD, EPA more specifically described the nature and timing of its First and Second Removal Actions (and a third, later EPA removal action) as follows: “EPA has conducted three removal actions at the Boarhead Farms Site. During the first two, one each in 1992 and 1993, over 2500 buried drums were located, excavated and disposed of offsite, reducing the contaminant levels in the subsurface soils. The excavated areas were then covered with a layer of clean fill to reduce exposure risk. A third removal action to intercept, collect and treat contaminated groundwater in an onsite treatment facility is continuing at this time.”

34. A separate (fourth) removal action was performed by General Ceramics, Inc. pursuant to a December, 1992 Administrative Order by Consent.

35. The OU-1 Consent Decree was entered by this Court on September 28, 2000. The OU-1 Consent Decree does not require the respondents thereunder (Plaintiffs Cytec, Ford and SPS) to reimburse EPA for the costs of the First and/or Second Removal Actions.

36. Subsequent to the September 28, 2000 entry of the OU-1 Consent Decree but prior to December 6, 2001 (the date of lodging of the OU-2 Consent Decree with this Court), Plaintiffs Cytec, Ford, SPS and TI signed the OU-2 Consent Decree.

37. The OU-2 Consent Decree obligates the Plaintiffs that signed it to reimburse EPA "Past Response Costs" costs totaling \$7,000,000 (principal amount).

38. The OU-2 Consent Decree defines "Past Response Costs" to mean "all costs, including, but not limited to, direct and indirect costs, that the United States paid at or in connection with the Site through July 31, 2000, plus Interest on all such costs which has accrued pursuant to 42 U.S.C. § 9607(a) through such date."

39. EPA provided Plaintiffs (or some of them) with a demand document relating to its Past Response Costs, which Plaintiffs placed in the document repository created for this litigation.

40. OU-2 is complete and there is no O&M associated with that remedy.

41. The groundwater monitoring and treatment required under OU-1 continues.

**D. Waste Streams and Volume of Waste Generated by Each of the Parties**

**(1) Plaintiffs**

42. Cytec's predecessor, American Cyanamid, operated a facility in Bound Brook, New Jersey that manufactured dyes, pigments, rubber chemicals, elastomers, organic intermediates and bulk pharmaceuticals. American Cyanamid disposed of both drummed and bulk waste. The wastes that were disposed of include flammable solids, waste still bottoms, waste NOX, flammable liquids, MBT tars and poisonous solids. American Cyanamid used Jonas

Waste Removal of Sewell, New Jersey to remove hazardous substances for disposal. Jonas Waste Removal used the Site on numerous occasions to dispose of its customers' waste.

43. Plaintiffs admit that at least 309,000 gallons of bulk waste from American Cyanamid was disposed of at the Site. Documentary evidence demonstrates that American Cyanamid generated at least 10,601,525 of bulk waste during the period 1974 to 1977, an additional 4,906,040 pounds of waste during the period 1976 to 1978, and 2,695 gallons of drummed waste during the period 1976 to 1978.

44. TI's predecessor National Rolling Mills operated a facility in Malvern, Pennsylvania that had two manufacturing operations – a steel division and an acoustical division. The steel division produced steel products using processes that resulted in bulk waste streams that included spent waste acid.

45. Testimony and documentary evidence will confirm that National Rolling Mills generated approximately 661,100 gallons of bulk waste during the period 1975 to 1976. Using an extrapolation calculation, Defendants' joint expert will testify that the volume of waste generated by TI's predecessor, National Rolling Mills, during the period 1970 to April 1974 is 1,959,533 gallons. The testimony of former National Rolling Mills employees confirms the bulk waste generation at the Malvern facility.

46. Ford's Watsontown facility manufactured wood cabinets for televisions, stereos and radios. Possible waste streams generated by this manufacturing process include TCE, lacquer finishes, shellacs, wood glues and hide glues.

47. Plaintiffs admit that at least 36,993 gallons of drummed waste from Ford was disposed of at the Site.

48. The Jenkintown, Pennsylvania facility of Standard Press Steel, SPS's predecessor, manufactured precision fasteners and precision metal products. Raw materials used by Standard Press Steel included cutting oils, cyanide, TCE (which was purchased at the rate of 10 to 20 drums per month), and chromic acid.

49. The waste generated by Standard Press Steel's manufacturing operations included both drummed and bulk waste. The wastes that were disposed of included chromic acid, cyanide, degreaser waste, mixed waste, nickel and some miscellaneous wastes. Most of these wastes were disposed of in 55-gallon drums.

50. Plaintiffs admit that at least 30,304 gallons of drummed waste from Standard Press Steel and 4,275 gallons of bulk waste from Standard Press Steel was disposed of at the Site. Using an extrapolation calculation, Defendants' joint expert will testify that the volume of waste generated by Standard Press Steel during the period 1969 to 1977 was as follows:

- a. Acetone waste – 200 gallons to 20,000 gallons
- b. Chromic acid waste – 30,000 gallons to 240,000 gallons
- c. Cyanide acid waste – 20,000 gallons to 175,000 gallons
- d. Degreaser waste – 9,000 gallons to 135,000 gallons
- e. Mixed chromic/cyanide waste – 35,000 gallons to 290,000 gallons
- f. Nickel waste – 200 gallons to 20,000 gallons
- g. Other wastes – 36,000 gallons to 349,000 gallons

51. Agere's predecessor, Western Electric, operated three facilities during the relevant time period, each of which generated waste. These three facilities are the North Carolina Works, the Allentown, Pennsylvania Works and the Reading, Pennsylvania Works.

The North Carolina Works facility manufactured rigid and flexible printed wiring boards, precision machined parts, crystal filters, electronic switching system card writers and cables, military equipment and printed waveguide devices. The wastes generated by the North Carolina Works facility include flux and flux thinner, waste chlorinated solvents, and used oil. Wastes generated at this facility were stored in 55-gallon drums.

52. The Allentown Works facility manufactured semi-conductors, thin film circuits, integrated circuits, ferrite devices, electron tubes, sealed contacts and hybrid integrated circuits. There were four manufacturing processes employed at the Allentown Works facility. These processes were (a) miniature tubes (electron tubes), (b) dry reed switch (sealed contacts), (c) thin film circuits, and (d) integrated circuits (manufactured semiconductors or hybrid integrated circuits). The Allentown Works facility generated waste that included chlorinated solvents (TCE), flammable solvents, copper nitrate, copper sulfate and waste acids. Agere admitted that the miniature tubes manufacturing process generated spent cleaning solvents which primarily contained TCE. The dry reed switch manufacturing process also generated spent TCE solvents that was stored in drums. The thin film circuit manufacturing process and the integrated circuit manufacturing process essentially generated the same wastes that included cleaning solvent waste (TCE, xylenes, acetone, mineral spirits), copper sulfate and hydrofluoric acid.

53. The Reading Works facility manufactured transistors, diodes, varistors, integrated circuits, electron tubes and light-emitted diodes. The Reading Works facility generated waste that included flammable solvents, chlorinated solvents, mixed chemicals and waste acids.

54. Documentary evidence demonstrates that at least 313,836 gallons of waste (drummed and bulk) from the Reading Works facility, at least 50,618 pounds of waste from the



North Carolina Works facility and at least 121,800 gallons from the Allentown Works facility were generated during the relevant time period. Using an extrapolation calculation, Defendants' joint expert will testify that the volume of waste generated for the period 1969-1977 by (a) the Reading Works facility was 2,510,688 gallons, (b) the North Carolina facility was 4,859,280 gallons; and (c) the Allentown Works facility was as follows:

- a. Flammable liquid waste – 280,000 gallons to 640,000 gallons
- b. Non-flammable solvents (TCE) – 192,000 gallons to 440,000 gallons
- c. Acids/miscellaneous chemicals – 87,200 gallons to 96,000 gallons

**(2) Settled Defendants**

55. Bostik South, predecessor to Crown Metro/Emhart, had a facility in Greenville, North Carolina and engaged in the manufacture of chemicals, colors, intermediates and reserovol. The waste generated by Bostik South included spent sulfuric/nitric acid.

56. Plaintiffs admit that Bostik South disposed of at least 7,125 gallons of bulk nitric acid waste at the Site. However, Plaintiffs sued Bostik South and thereafter settled their CERCLA §113 contribution claim against Bostik for \$100,000. Documentary evidence discloses that Bostik South generated at least 37,665 gallons of bulk waste during the relevant time period.

57. Ciba, predecessor to Novartis, had a facility in Cranston, Rhode Island and engaged primarily in batch manufacturing which manufactured new products in commercial quantities. One of the products manufactured by Ciba's facility was known as Tolban, which process utilized several intermediates, including mixed acid that generated waste of spent sulfuric acid.

58. Plaintiffs admit that at least 13,450 gallons of bulk waste was disposed of by Ciba at the Site. However, Plaintiffs sued Ciba and thereafter settled their CERCLA §113 contribution claim against Ciba for \$162,500. Documentary evidence demonstrates that at least 69,367 gallons of bulk waste was generated by Ciba in 1976 and 1977.

59. Knoll had five buildings that included storage, furniture manufacturing/offices, and product development/design. DeRewal Jr. and Barsum testified that they picked up bulk waste from Knoll's Pennsburg, Pennsylvania facility.

60. Plaintiffs deny that any waste generated by Knoll was disposed of at the Site. However, Plaintiffs sued Knoll and thereafter settled their CERCLA §113 contribution claim against Knoll for \$207,500. Documentary evidence demonstrates that at least 39,000 gallons to 45,000 gallons of an unidentified liquid waste was generated by Knoll during the early to mid-1970s.

61. Plymouth Tube operated a facility called the Ellwood Ivins Plant in Horsham, Pennsylvania. Plymouth Tube was engaged in the manufacture of stainless steel tubes. The waste generated by Plymouth Tube's manufacturing operations included spent pickle liquor whose composition was 5% hydrofluoric acid, 11% nitric acid and 84% water.

62. Plaintiffs admit that Plymouth Tube disposed of at least 14,901 gallons of bulk pickle liquor at the Site. However, Plaintiffs sued Plymouth Tube and thereafter settled their CERCLA §113 contribution claim against Plymouth Tube for \$425,000. Documentary evidence discloses that Plymouth Tube generated and disposed off-site bulk acid waste of at least 28,000 gallons during 1976. Using an extrapolation calculation, Defendants' joint expert will testify that the volume of waste generated by Plymouth Tube during the period 1969-1977 ranges from 28,000 gallons to 299,000 gallons.

63. Quickline Design & Manufacturing had a facility in Cherry Hill, New Jersey and manufactured circuit boards during the relevant time period. The waste that was generated from these operations included waste chromic acid.

64. Plaintiffs admit that at least 838 gallons of drummed waste etchant from Quickline was disposed of at the Site. However, Plaintiffs sued Quickline and thereafter settled their CERCLA §113 contribution claim against Quickline for \$50,000. Documentary evidence demonstrates that at least 1,925 gallons of waste etchant was generated by Quickline during the relevant time period.

65. Rohm & Haas had a facility in Philadelphia, Pennsylvania and manufactured specialty chemicals including ion exchange resins and herbicides. Former DCC drivers recalled transporting for disposal wastes that included methanol solvent, unspecified waste solvents, waste latex from various plants, hauling solvents, still bottoms, acetone, press papers, hydrochloric acid, acrylic latex, "Seven" insecticide and unspecified drummed waste.

66. Plaintiffs deny that any waste generated by Rohm & Haas was disposed of at the Site. However, Plaintiffs sued Rohm & Haas and thereafter settled their CERCLA §113 contribution claim against Rohm & Haas for \$35,000. In addition, a Rohm & Haas drum was discovered at the Site during one of the removal actions.

67. Simon Wrecking operated a manufacturing facility in Williamsport, Pennsylvania. Plaintiffs deny any waste generated by Simon Wrecking was disposed of at the Site. However, Plaintiffs sued Simon Wrecking and thereafter settled their CERCLA §113 contribution claim against Simon Wrecking for \$50,000. In addition, testimony from former DCC drivers demonstrates that Simon Wrecking's bulk liquid waste and acids were disposed of by DCC at the Site. Documentary evidence demonstrates that at least 178,000 gallons of paint

sludge, solvents, waste acid and waste oil was generated by Simon Wrecking during the relevant time period.

68. Unisys was formerly Burroughs Corporation and is the successor to Sperry Corporation. The facility at issue was located in Utica, New York and manufactured computers and other data processing equipment. Its processes were typical of those used in the manufacturing of printed circuit boards.

69. Plaintiffs admit that at least 3,292 gallons of Unisys drummed waste was disposed of at the Site. However, Plaintiffs sued Unisys and thereafter settled their CERCLA §113 contribution claim against Unisys for \$50,000. Documentary evidence discloses that at least 3,615 gallons of drummed waste, including cyanide, was generated by Unisys during the relevant time period.

70. Thomas & Betts acquired Ansley Electronics Corporation which manufactured printed circuit boards at its facility in Perkasio, Pennsylvania. Wastes generated by Ansley included drummed waste etching solution and solvents.

71. Plaintiffs deny that any waste from Ansley Electronics was disposed of at the Site. However, Plaintiffs sued Ansley and thereafter settled their CERCLA §113 contribution claim against Ansley for \$42,500. In addition, DCC invoices and pick up tickets show that DCC had waste disposal dealings with Ansley in January of 1971 and in June of 1971. Based upon these records, the total waste hauled by DCC in those months was 3,615 gallons.

72. Techalloy/Rahns Specialty had a manufacturing facility in Rahns, Pennsylvania that manufactured specialty steel products, including wire rod and strip. Techalloy used TCE in its wire cleaning operations. Waste streams generated by Techalloy/Rahns Specialty include spent pickle liquor and spent acids.

73. Plaintiffs admit that at least 226,567 gallons of Techalloy bulk waste and 2,500 gallons of Techalloy drummed waste was disposed of at the Site. Plaintiffs sued Techalloy and thereafter settled their CERCLA §113 contribution claim against Techalloy for \$3,200,000.

74. Plaintiffs admit that 281 gallons of waste generated by the Navy was disposed of at the Site. However, Plaintiffs sued the Navy and thereafter settled their CERCLA §113 contribution claim against the Navy for \$100,000.

75. Flexible operated a manufacturing facility producing electronic circuits. Flexible, in its own operations, and as successor to Etched Circuits, produced waste streams that included waste acids, spent etchant and ammonia solutions containing copper. Plaintiffs admit that at least 26,076 gallons of bulk waste and 63,281 gallons of drummed waste generated by Flexible/Etched Circuits were disposed of at the Site. Plaintiffs sued Flexible and thereafter settled their CERCLA § 113 contribution claim against Flexible for \$790,000.

**(3) Defendants**

76. AETC arranged for the transportation and disposal of wastes generated by Ashland and Diaz Chemical Corporation. As set forth in Plaintiffs' Responses to Defendants' Joint Contention Interrogatories, AETC is responsible for the 43,275 gallons of bulk waste generated by Diaz that was disposed of at the Site.

77. Ashland operated a facility in which it manufactured specialty chemicals and generated wastes including spent acids, spent solvents and flammable liquids that were disposed of at the Site. In fact, two intact drums and one drum fragment, each bearing an Ashland label, were excavated at the Site in 2003 as part of the OU-2 work. One of the intact drums contained benzene, several other benzene compounds, phenols, methylene chloride, acetone, toluene, and toluene compounds. As set forth in Plaintiffs' Responses to Defendants'

Joint Contention Interrogatories, 137,829 gallons of bulk waste and 652 gallons of drummed waste generated by Ashland were disposed of at the Site.

78. Carpenter operated a manufacturing facility producing specialty steel products in Reading, Pennsylvania. Waste streams generated at Carpenter's facility included spent acids, caustics and heavy sludge. DeRewal Jr. testified that he hauled between 30 and 40 tanker truck loads of waste from the Carpenter facility with some of the waste being transported to the Site. As set forth in Plaintiffs' Responses to Defendants' Joint Contention Interrogatories, 992,807 gallons of bulk waste generated by Carpenter were disposed of at the Site.

79. H&H Tube manufactured small-diameter precision tubing made from tube hollows (*e.g.* 1 1/4" O.D./1" I.D. or 2" O.D./1" I.D.) of stainless steel, carbon steel and various alloyed steels.

80. The waste streams generated by H&H Tube's manufacturing process included degreaser still bottoms and spent acids. Manufacturing waste was temporarily stored in 55-gallon drums and holding tanks. The 55-gallon drums were removed and the holding tanks were emptied by waste removal companies. The other waste streams generated at H&H Tube were (a) office trash, (b) trash from manufacturing operations (both of which were disposed of in an on-premises dumpster that was removed by a waste removal company) and (c) "industrial waste solution." The "industrial waste solution" that was generated during the plant wide cleanup and which contained wash water, oil, grease, dirt and grime, was also stored in 55-gallon drums for disposal.

81. Plaintiffs contend that 4,285 gallons of H&H Tube drummed waste and 8,550 gallons of H&H Tube bulk spent acid were disposed of at the Site.

82. An invoice dated February 1973 referred to 62 drums H&H Tube industrial waste solution.

83. Assuming the Court were to find the testimony of Bruce DeRewal credible, he testified that no more than 50 55-gallon drums were picked up at H&H Tube and brought to the Site.

84. During the relevant time period, H&H Tube's spent acid bulk waste was hauled by Waste Conversions Systems and/or a successor to Waste Conversions Systems and did not go to the Site.

85. Notwithstanding the fact that H&H Tube's bulk waste during the relevant time period was hauled by Waste Conversions and/or its successors, Manfred DeRewal, Jr. testified that he picked up one tanker load of bulk waste from H&H Tube.

86. NRM had a facility in Malvern, Pennsylvania that continued the manufacturing operations of TI's predecessor during the period 1974 to 1977 and generated the same type of bulk waste streams which included spent waste acid. As set forth in Plaintiffs' Responses to Defendants' Joint Contention Interrogatories, 650,475 gallons of bulk waste generated by NRM was disposed of at the Site.

**E. Nexus to the Site**

87. A 1997 document submitted to the EPA, entitled CERCLA Hazardous Substance Matrixes, was prepared by EPA's consultant, Booz-Allen & Hamilton, Inc. The matrixes identify American Cyanamid, Ashland, General Ceramics, National Rolling Mills, Philco-Ford and SPS Technologies as potentially responsible parties ("PRPs") with contaminant matches to the hazardous substances found at the Site.

88. Drums discovered and removed from the Site include drums from Amchem (American Chemical), Ashland, Rohm & Haas, Dow, Philco Ford, Conoco, Celanese Chemical Company

89. Plaintiffs claim that each of the Defendants have nexus to the Site and that some of the wastes generated by each of the Defendants was disposed of at the Site. Plaintiffs rely upon driver testimony to support the allegation that H&H Tube's waste was disposed of at the Site.

90. During the relevant time period, many disposal locations, in addition to the Site, were used by DCC. Additional disposal locations included the following:

- Enterprise Avenue (Philadelphia)
- Pottstown Landfill (on the road to Reading, PA)
- 3015 Ontario Street (the Ontario facility)
- Wissinoming Park
- RED, Inc. (Bedminster property – family home)
- Iron Oxide Company (Elizabeth, NJ)
- Reidsville, NC (2d ECHO facility)
- New Yorker Peters (Elizabeth, NJ)
- William Carriccino – Chemical Control Corp./CCC
- Plymouth Fertilizer (Plymouth, NC)
- Buckeye Finishing (Ohio)
- Frenchtown a/k/a Kingwood
- Allentown
- G.R.O.W.S.
- ABM Disposal
- Marvin Jonas landfills

91. In 1996, when DeRewal, Sr. was deposed by the EPA, he testified that he did not recall doing much of anything with H&H Tube. Seven (7) years later, in 2003, DeRewal, Sr. altered his testimony and stated that DCC did business with H&H Tube, although he remembers next to nothing about H&H Tube. DeRewal, Sr. further testified that he was not familiar with the types of waste generated by H&H Tube and had no personal knowledge regarding the disposal of H&H Tube's waste.



92. In 1997, when DeRewal, Jr. was deposed by the EPA, he testified that he could not recall if DCC did business with H&H Tube and that he basically knew nothing about H&H Tube. Six (6) years later, in 2003, DeRewal, Jr. altered his testimony and stated that he picked up a single bulk load from H&H Tube.

93. In 1997, Bruce DeRewal was deposed by the EPA and testified that not only was he not familiar with H&H Tube, but also that he had never heard of H&H Tube. Six (6) years later, in 2003, Bruce DeRewal altered his testimony and stated that he went to H&H Tube's facility in Norristown less than 10 times to pick up drummed waste and that 25% of those drums went to the Site. He also testified that he did not know the contents of the drums that he picked up and that he did not know what happened to the drums that he brought to the Site.

94. The only documentary evidence associating H&H Tube with DCC (not with the Site) is a single 1973 invoice<sup>2</sup> which states the following:

<u>Quantity</u>	<u>Description</u>	<u>Price</u>	<u>Amount</u>
1	250 gallon oil tank		\$25.00
26	55 gallon drums Industrial Waste Solution	\$6.00/ea	\$156.00
36	30 gallon drums Industrial Waste Solution	\$5.00/ea	\$180.00
25	Empty 55 gallon drums delivered	\$0.75/ea	<u>\$18.75</u>
			\$379.75

During the nexus depositions, no witness was able to explain what these charges represented – *i.e.* whether DCC was delivering drums to or picking up drums from H&H Tube; whether these were empty drums or full drums; or how the pricing was established.

95. Assuming the Court were to find the testimony of Bruce DeRewal was credible, he testified that no more than 50 55-gallon drums were picked up at H&H Tube and brought to the Site.

96. Of the chemical compounds found in the soils and groundwater of Hot Spot 1 at concentrations in excess of the Drinking Water Maximum Contaminant Levels (“MCLs”) and Risk Based Concentrations RBCs, only chromium, nickel, and TCE would have been constituents in the wastes generated by H&H Tube’s facility. As a group, the contaminants of concern in the soil and groundwater at Hot Spot 1 could not have come from H&H Tube’s waste.

97. Of the chemical compounds found in the soils and groundwater of Hot Spot 2 at concentrations in excess of the Drinking Water MCLs and RBCs, only chromium, manganese, nickel, and TCE would have been constituents in the wastes generated by H&H Tube’s facility. As a group, the contaminants of concern in the soil and groundwater at Hot Spot 2 could not have come from H&H Tube’s waste.

98. Of the chemical compounds found in the soils and groundwater of Hot Spot 3 at concentrations in excess of the Drinking Water MCLs and RBCs, only chromium, manganese, and nickel would have been constituents in the wastes generated by H&H Tube’s facility. As a group, the contaminants of concern in the soil and groundwater at Hot Spot 3 could not have come from H&H Tube’s waste.

99. As with the drum wastes, however, the chemical fingerprint of the contaminated soil and groundwater does not match the waste generated by H&H Tube’s facility since the waste found at the Site contains hazardous substances (*i.e.*, benzene, PCE, and MiBK, among others) that were not used at H&H Tube’s facility and were not constituents of the waste generated by H&H Tube’s facility. Therefore, the waste associated with the soil and groundwater contamination at the Hot Spots can not be attributed directly to H&H Tube.

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<sup>2</sup> This invoice is the subject of a motion *in limine* which will be filed pursuant to the Court’s May

100. Nothing on this single invoice indicates where these drums were disposed of, if in fact they were picked up from H&H Tube, as opposed to being delivered to H&H Tube.

101. Plaintiffs have admitted that Cytec has a nexus to the Site.

102. Plaintiffs have admitted that Ford has a nexus to the Site.

103. Plaintiffs have admitted that SPS has a nexus to the Site.

104. Plaintiffs have admitted that Quickline has a nexus to the Site.

105. Plaintiffs have admitted that Simon Wrecking has a nexus to the Site.

106. Plaintiffs have admitted that Novartis has a nexus to the Site.

107. Plaintiffs have admitted that Bostik has a nexus to the Site.

108. Plaintiffs have admitted that Techalloy has a nexus to the Site.

109. Plaintiffs have admitted that Plymouth Tube has a nexus to the Site.

110. Plaintiffs have admitted that Rohm & Haas has a nexus to the Site.

111. Plaintiffs have admitted that Unisys has a nexus to the Site.

112. Plaintiffs have admitted that Flexible Circuits has a nexus to the Site.

113. Plaintiffs have admitted that Thomas & Betts has a nexus to the Site.

114. Plaintiffs have admitted that the Navy has a nexus to the Site.

**F. Equitable Allocation**

115. As a result of the nature of the disposal, the period of time of disposal, the wastes that were disposed of, and the manner in which the wastes were disposed, the wastes are commingled and are not divisible.

116. Remedial action was necessary to address concentrations above standards for metals in soil and ground water.

117. All of the remedial alternatives that were considered protective of human health and the environment involved chemical precipitation of metals to meet the discharge limits.

118. When present at sufficiently high concentration in certain environments, metals can hinder or prevent degradation of organic materials by inhibiting biological activity.

119. Acid wastes released to the environment increased the mobility of metals and the corrosivity of the subsurface materials, thus contributing to the need for and cost of the response activities taken at the Boarhead Farms Superfund Site.

120. The acidity of the acid wastes disposed of in bulk increased the acidity of the water in the subsurface, thus increasing the solubility and mobility of these metals.

121. The disposal of acids tended to mobilize metals at the Site.

122. Neutralization of acids by interaction with the soil depletes the general buffering capacity of soil, resulting in a subsurface environment that is more susceptible to significant changes in pH. This facilitates the migration of chemicals that are more soluble in either acidic or basic conditions.

123. Early releases of acid wastes facilitated the migration of contaminants released at later times.

124. Metal drums that were placed in soils that had been affected by earlier releases of acids would tend to corrode faster than drums placed in unaffected soils. Releases of acid that occurred after the drums were in place would also have increased the rate of corrosion.

125. Releases of acid to the subsurface environment tended to increase the rate at which the buried drums released their contents.

126. In addition to increasing the mobility of metals, releases of acid tended to increase the persistence of organic chemicals of potential concern ("COPCs"), thus increasing the need for and cost of remediation.

127. Disposal of all materials, including materials that are essentially inert, contributed to the environmental conditions that led to the response activities taken at the Site.

128. Even releases or burial of inert materials (if they occurred) would have affected soil moisture levels, soil structure and permeability, groundwater elevations and recharge rates, and other factors that can influence the fate and transport of the chemicals addressed by the response activities.

129. Even if their pH was nearly neutral, releases of large quantities of liquids would cause increased migration of materials in the subsurface. This would tend to reduce the concentrations of hazardous substances and spread them over a larger area.

130. The various wastes disposed of at the Site interacted with other wastes and environmental media in a very complex manner to cause the environmental conditions that led to the response activities.

131. A wide variety of wastes were released in varying modes (bulk disposal, drum burial) at both known and unknown locations at the Site over a period of years into a complex environment.

132. All of the wastes disposed of at the Site contributed in some manner to the environmental conditions that led to the need for and the cost of the response activities at the Site.

133. Because most metals are more soluble in acidic solutions, the activity of these wastes increased the mobility of metals in the subsurface environment. Even corrosive

waste solutions that did not contain metals promoted the degradation of buried drums and altered the subsurface environment in ways that increased the mobility and persistence of hazardous chemicals. Such solutions also mobilized metals that were naturally present in the soils at the Site.

134. Even near-neutral acidic wastes consume some of the buffering capacity of the soils; this facilitates the migration of many chemicals (*e.g.*, metals) that are more soluble in acidic or basic conditions.

135. Pickle liquors released at the Site increased the acidity and the levels of metals in both soil and groundwater.

136. All corrosive wastes (both acidic and basic) tended to promote the degradation of metal drums and the release of their contents to the environment, and all of the acidic wastes increased the concentrations and mobility of the metals, which increased the cost and complexity of the groundwater extraction and treatment systems.

137. Plaintiffs' expert, Jay Vandeven, opines that all of the wastes disposed of at the Site contributed in some manner to the environmental conditions that led to the response activities at the Site.

138. Similarly, H&H Tube's expert, Dr. Kirk W. Brown, Ph.D., opines that the bulk and drummed waste disposed of at the Site are indivisible and have all contributed to the remediation of the Site.

139. Because the wastes are commingled and not divisible, equitable allocation should be based upon the admissible evidence as to the volume of waste that was disposed of at the Site by all parties whose waste went to the Site.

140. Plaintiffs admit that a number of the Plaintiffs and a number of the Settled Defendants disposed of waste at the Site.

141. Plaintiffs have conceded that the following volume of wastes were disposed of at the Site by the Plaintiffs and Settled Defendants:

Company	Waste Type	Bulk/Drummed	Waste In (gallons)
Cytec	Ammonia	Bulk	309,000
Ford	Plastics	Drummed	12,906
Ford	Finishing material	Drummed	22,415
Ford	Industrial waste	Drummed	1,672
SPS	Chromic acid	Drummed	14,223
SPS	Cyanide waste	Drummed	14,878
SPS	Cyanide waste	Bulk	4,275
SPS	Acetone	Drummed	157
SPS	Nickel waste	Drummed	105
Quickline	Etchant	Drummed	838
Navy	Waste	Drummed	281
Simon Wrecking	Sulphuric nitrate	Bulk	3,025
Novartis	Nitric acid	Bulk	13,450
Bostik	Nitric acid	Bulk	7,125
Techalloy	Waste oil	Drummed	2,375
Techalloy	Pickle liquor	Bulk	215,239
Plymouth Tube	Pickle liquor	Bulk	14,901
Rohm & Haas			0
Unisys	Etchant	Drummed	3,292
Flexible Circuits	Etchant	Drummed	30,707

142. Defendants Carpenter, Flexible, Ashland, T&B and Rahns each had wastes that contained one or more of the following hazardous substances:

- A. TCE and other chlorinated volatile organic compounds
- B. Acetone
- C. Methyl ketone
- D. Nickel
- E. Chromium
- F. Copper

143. Plaintiffs' calculated each party's equitable allocation based upon the volume of waste generated by each party and the amount of waste Plaintiffs calculate was

disposed of at the Site. As set forth in Plaintiffs' Responses to Defendants' Joint Contention Interrogatories, the total volume of waste disposed of at the Site (drummed and bulk) is 3,630,962 gallons.

144. If the testimony of the DCC drivers were to be believed, Dr. Brown calculated the volume of bulk waste disposed of at the Site to be 13,062,125 gallons and the volume of drummed waste disposed of at the Site to be 141,460 gallons for a total volume of waste disposed of at the Site of 13,201,585 gallons.

145. The total number of drums discovered at and removed from the Site was 2,572.

146. The total maximum volume of all drums (assuming full drums at 55 gallons) removed from the Site was 141,460 gallons (2,572 drums x 55 gallons).

147. The total maximum volume of bulk waste disposed at the Site was 13,060,125 gallons.

148. The total maximum volume of waste disposed of at the Site is 13,201,585 gallons.

149. Dr. Brown calculated the volume of H&H Tube's drummed waste disposed of at the Site, in the event the testimony of Bruce DeRewal was believed, to be 2,750 gallons.

150. Dr. Brown calculated the volume of H&H Tube's bulk waste disposed of at the Site, in the event the testimony of Manfred DeRewal, Jr. was believed, to be 3,525 gallons.

151. Dr. Brown calculated H&H Tube's volumetric share of the total volume of waste disposed of at the Site, in the event the testimony of Bruce DeRewal and Manfred DeRewal, Jr. was believed, to be 0.048% (6,275 gallons ÷ 13,201,585 gallons x 100).



152. As set forth in Plaintiffs' Responses to Defendants' Joint Contention Interrogatories, using the figures advanced by Plaintiffs, the volumetric share of the parties that Plaintiffs admit/contend disposed of waste at the Site is as follows:

Party Defendants	Waste In	Volumetric Share	Increase to PRPs with Knowledge	50% Cooperation Credit to Plaintiffs
			0.1	0.5
Carpenter	992.807	38.66%	42.52%	46.26%
Ashland/AETC	138.481	5.39%	5.93%	6.45%
Diaz/AETC	43.275	1.68%	1.85%	2.02%
Flexible	58.650	2.28%	2.09%	2.28%
Etched/Flexible	30.707	1.20%	1.09%	1.19%
NRM	650.475	25.33%	23.19%	25.23%
Handy	12.835	0.50%	0.46%	0.50%
<b>Total</b>	<b>1,927,230</b>	<b>75.04%</b>	<b>77.14%</b>	<b>83.93%</b>

Plaintiffs				
Cytec	309.000	12.03%	11.02%	5.51%
Ford	36.993	1.44%	1.32%	0.66%
SPS	34.579	1.35%	1.23%	0.62%
Agere	-	0.00%	0.00%	0.00%
TI	-	0.00%	0.00%	0.00%
<b>Total</b>	<b>380.572</b>	<b>14.82%</b>	<b>13.57%</b>	<b>6.78%</b>

Settled				
Plymouth	14.901	0.58%	0.53%	0.53%
Quickline	838	0.03%	0.03%	0.03%
Navy	281	0.01%	0.01%	0.01%
Simon	3.025	0.12%	0.11%	0.11%
Unisys	3.292	0.13%	0.12%	0.12%
Rohm	-	0.00%	0.00%	0.00%
Bostik	7.125	0.28%	0.25%	0.25%
Novartis	13.450	0.52%	0.48%	0.48%
Techallov	217.614	8.47%	7.76%	7.76%
Thomas	-	0.00%	0.00%	0.00%
<b>Total</b>	<b>210.528</b>	<b>10.14%</b>	<b>9.29%</b>	<b>9.29%</b>
<b>Waste In</b>	<b>2,568,328</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

#### G. Damages

153. Plaintiffs seek to recover from Defendants monies they paid in connection with the remediation and investigation of the Site. Through 2007, Plaintiffs claim to have

expended \$13,903,116.50<sup>3</sup> for: (a) response costs incurred in connection with OU-1 (\$3,604,189.06) and EPA Oversight Costs pursuant to the OU-1 Consent Decree (\$288,040.67); (b) response costs incurred in connection with OU-2 (\$2,261,710.99) and EPA Oversight Costs pursuant to the OU-2 Consent Decree (\$325,981.34); and (c) payment of EPA's Past (\$7,062,962.08) and Interim (\$360,232.38) Oversight Costs required by the OU-2 Consent Decree.

154. Plaintiffs seek to recover on behalf of Smiths Group Services Corporation and Smith Group North America, Incorporated ("Smiths") monies Smiths paid on behalf of TI. The total amount of money paid by Smiths, according to the Zaumeyer reports, is \$2,024,774.99.

155. Smiths paid on behalf of TI \$1,796,528.11 for EPA Past, Interim and/or Future Oversight Costs and \$43,333.33 for OU-1 costs and \$141,250.00 for OU-2 costs.

156. In its January 11, 2008 Memorandum Opinion, the Court determined that Smiths' claims were barred by the statute of limitations. Plaintiffs' claims must be reduced by a total of \$2,024,774.99.

157. Plaintiffs paid EPA monies to which the EPA was not entitled because the statute of limitations barred those claims. Specifically, Plaintiffs seek to recover past costs from Defendants for EPA oversight costs incurred in connection with the 1992 and 1993 removal actions.

158. An action by the government against Plaintiffs and Defendants for recovery of the costs of the First Removal Action would have been timely if filed as late as 1995 (the three year anniversary of the completion of the First Removal Action).

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<sup>3</sup> Because Plaintiffs' claims do not include claims to recover monies paid by NRM and Worthington, Plaintiffs' total claim is \$693,774.06 less than the total amount of money actually

159. The First Removal Action was discrete and was completed in 1992.

160. An action by the government against Plaintiffs and Defendants for recovery of the costs of the Second Removal Action would have been timely if filed as late as 1996 (the three year anniversary of the completion of the Second Removal Action).

161. The Second Removal Action was discrete and was completed in 1993.

162. Because EPA did not timely commence an action for these costs, EPA's claim for these costs was time-barred. Accordingly, in 2000 or 2001, at the time that Plaintiffs Cytec, Ford, SPS and TI signed the OU-2 Consent Decree, neither Plaintiffs nor Defendants had any legally enforceable liability to EPA for these costs.

163. The amounts paid by Plaintiffs to the EPA with respect to claims that are barred by the statute of limitations are not recoverable from Defendants.

164. Plaintiffs' damage claim must be reduced by the amounts paid by plaintiffs to the EPA with respect to claims that are barred by the statute of limitations.

165. Plaintiffs admitted that the First and Second Removal Actions were separate and discrete actions that were completed in 1992 and 1993 respectively. Plaintiffs' Complaint, Amended Complaint, Second Amended Complaint, Third Amended Complaint and Fourth Amended Complaint advanced a version of the facts that demonstrated that there were separate and discrete removal actions.

166. Plaintiffs' claim for future costs are overstated.

#### **VI. An Estimation as to the time for Presentation of Each Party's Case**

As to H&H Tube – 1 to 2 days

As to Defendants' case against Plaintiffs – 3 to 5 days

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paid for OU-1, EPA Past Oversight Costs, EPA Interim Oversight Costs and EPA Future Oversight Costs relating to OU-1.

**VII. All Other Disclosures Required by Fed. R. Civ. P. 26(a)(3)**

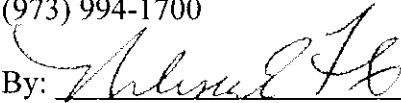
The designation of those witnesses whose testimony the party expects to present by deposition:

Should one or more of the individuals identified in Section II above be unavailable to testify at trial, H&H Tube intends to offer into evidence portions of the transcripts of the depositions taken in this action of those individuals.

Respectfully submitted,

CARELLA, BYRNE, BAIN, GILFILLAN,  
CECCHI, STEWART & OLSTEIN  
5 Becker Farm Road  
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(973) 994-1700

Dated: May 19, 2008

By:   
\_\_\_\_\_  
JOHN M. AGNELLO  
MELISSA E. FLAX